

The rejection is traversed to the extent that it would apply to the amended claims. Reconsideration is respectfully requested.

Claim 46 recites, in pertinent part,

"a second broadcast entry level, different than the first broadcast entry level for enabling a user to enter directly a predetermined one of the first, second and third broadcast interactive levels."

Burke describes a system for generating images representative of a store shelf. The system includes a retain space management system for generating information describing products and shelf sizes and locations in three dimensions, and including a code which is unique to each product. A user may manipulate the display to change what is being viewed, to examine product packages and to purchase products. The passage cited in column 1 describes a home shopping service which is stored on video disc. The passage explains how video presentations are provided in a tree-type structure, but there is no explanation as to how customers actually place an order. There is no teaching, disclosure or suggestion in Burke of two different broadcast entry levels, one for entering a first broadcast interactive level and the other allowing the user to enter any one of the first, second and third broadcast interactive levels, as recited in claim 46.

The assertion in the Office Action at page 3 that "claim 46 is broad enough to read on Burke, since in the Burke the user is at least enabled to enter from broadcast level one" makes no difference, because the second broadcast entry level as recited in claim 46 is not broadcast level one. Claim 46 has been amended further to make the distinction between the first and the second broadcast levels more clear, but the distinction existed previously. A rejection under 35 U.S.C. § 102(e) requires every element recited in the claim to exist, either implicitly or

inherently, in a single reference. Since all of the elements recited in claim 46 are not taught in Burke, claim 46 is submitted to be allowable. Withdrawal of the rejection of claim 46 is earnestly solicited.

Claims 47 through 50, 52, 55 through 58, and 69 depend from claim 46 and add further distinguishing elements. Claims 47 through 50, 52, 55 through 58, and 69 are thus also submitted to be allowable. Withdrawal of the rejection to claims 47 through 50, 52, 55 through 58, and 69 is also earnestly solicited.

Claim 61 is rejected under 35 U.S.C. § 102(e) as anticipated by Mankovitz, US 5,559,550. The rejection is traversed. Reconsideration is respectfully requested.

Claim 61 recites, in pertinent part, "each signal comprising video data defining a television programme and programme scheduling data". There is no teaching, disclosure, or suggestion in Mankovitz of combining program scheduling data with each video signal in received television signals. Mankovitz, in fact, specifically describes sending scheduling information only *periodically* at column 9, line 19. Claim 61 is thus submitted to be allowable. Withdrawal of the rejection is earnestly solicited.

Claims 62 through 64 are rejected under 35 U.S.C. § 102(e) as anticipated by Knee et al., US 5,589,892. The rejection is traversed. Reconsideration is respectfully requested.

Claims 62 through 64 all recite, in pertinent part, "the receiver comprising a processor adapted to generate output signals for display or an image representing a(n ordered) list of channels receivable by the receiver." It is respectfully submitted that the Receiver 27 of Knee contains no processor at all, as may be seen in Fig. 1, let alone a processor capable of generating an output signal representing a list of channels.

Claims 62 through 64 are thus submitted to be allowable. Withdrawal of the rejection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 103

The Office Action rejects claims 51 and 53 under 35 U.S.C. § 103 as unpatentable over Burke in view of Hendricks (WO 94/14284). The rejection is traversed. Withdrawal of the rejection is respectfully requested.

The Office Action notes correctly that Burke discloses no stored template data. However, claims 51 and 53 recite ~~the broadcast ... template data~~, and Burke doesn't disclose that either. Nor does the reprogrammable software stored in memory cited in Hendricks amount to broadcast template data. Thus, combining Burke and Hendricks will not result in the claimed invention, since neither Burke nor Hendricks disclose broadcast template data individually. Claims 51 and 53 are thus submitted to be allowable. Withdrawal of the rejection of claims 51 and 53 is earnestly solicited.

Claims 1, 3 through 8, 10 through 33, 35 through 53, and 55 through 69 are rejected under 35 U.S.C. § 103(a) as unpatentable over Florin et al., US 5,594,509 in view of Green, US 5,664,110. The rejection is traversed. Withdrawal of the rejection is respectfully requested.

Amended claim 1 recites, in pertinent part:

"the processor being responsive to received command signals to vary the interactive image and to cause the modem to transmit data to and receive on-line data from a remote site for on-line interaction via the interactive image between the viewer and the remote site."

And amended claim 28 recites:

"responding to received command signals by varying the interactive image and causing the modem to establish a

telecommunications link a remote site for on-line interaction via the interactive image between the viewer and the remote site"

It is submitted that causing the modem to establish a telecommunications link a remote site for on-line interaction via the interactive image between the viewer and the remote site, as recited in amended claims 1 nor 28, is disclosed in neither Florin nor Green. Florin discloses an audio-visual transceiver 54 for receiving from a service provider 50 cable television or telephone services over a cable 52 (Fig. 2). The transceiver may also be used in conjunction with other electronic transmission systems such as satellite service systems. The electronic spectrum of signals provided by the service provider 50 includes at least one digital program listing channel, a plurality of back channels, standard analog TV channels, and additional definable digital channels offering a variety of interactive services. The back channels are used to engage in a variety of transactions, such as ordering products, pay-per-view movies, etc. In operation, any request by a user to view a pay-per-view movie or order a product is transmitted over at least one back channel to the service provider. In the first paragraph of page 31 of Florin, it is stated that the transceiver may comprise additional modules, such as a modem for exchanging digital data over telephone lines. However, Florin does not specify how the modem could be used in interactive services, and it clearly does not disclose or suggest the use of the modem in the way it is used in the receiver of amended claims 1 and 28. In fact, Florin sets out that the data exchange for the interactive services is performed via the back channels of the signal spectrum provided by the service provider, as indicated above. This is in marked contrast to the receiver of amended claims 1 and 28, which causes a modem to establish a telecommunications link to a remote site for on-line interaction in response to viewer manipulation of an

input device to vary an interactive image. By utilizing a telecommunications link instead of back channels, transmission bandwidth of the broadcast digital television signals is saved. As stated in the fourth paragraph on page 2 of the description, this is one of the problems of the prior art that the invention aims to overcome.

Green describes a remote ordering system arranged to provide a user with the ability to build and edit one or more lists and manipulate a display of the same information. The remote ordering system allows the user to order items from a merchant without having to travel to the merchant's location. The system comprises a modem for establishing a link with a merchant database (column 5, line 7). Data from the database can be displayed by the system. All that this reference really shows is that a modem can be used to connect a computer to a remote database. It does not, either alone or in combination with the Florin reference, specify how the modem could be used in interactive services, and does not disclose or suggest the use of the modem in the way it is used in the receiver of claims 1 and 28. Furthermore Florin uses the back channels in the exchange of data for interactive services. These channels are carried in the same medium (i.e. the cable) as the TV channels. Similarly, in Green, data is transferred via a single medium, namely a telephone line. In the invention, as defined by claim 1, broadcast interactive images are transferred via the broadcast medium (e.g. satellite or cable) and service-specific information is transferred via a different medium i.e. the telephone line. This use of two different media enables broadband images to be transmitted in order to give a realistic simulation of a shopping environment, while allowing narrow band, transaction-specific information to be exchanged via a telephone line. This approach enhances realism without significantly increasing the system

overheads. The approach is simply not disclosed or suggested in either inference.

Accordingly, amended claims 1 and 28 and their dependent claims are believed to be patentable over Florin in view of Green.

Claims 5, 15, 31, and 38 are rejected under 35 U.S.C. § 103(a) as unpatentable over Florin in view of Green, and further in view of Hendricks. The rejection is traversed. Withdrawal of the rejection is respectfully requested.

Claims 5, 15, 31, and 38 depend on one of claims 1 or 28. Neither Florin nor Green teach, disclose, nor suggest "responding to received command signals by varying the interactive image and causing the modem to establish a telecommunications link a remote site for on-line interaction via the interactive image between the viewer and the remote site" as discussed above with respect to claims 1 and 28. It is respectfully submitted that Hendricks does not, either. Since neither Florin, Green nor Hendricks disclose responding to received command signals by varying the interactive image and causing the modem to establish a telecommunications link a remote site for on-line interaction via the interactive image between the viewer and the remote site separately, their combination cannot, either. Claims 5, 15, 31, and 38 are thus submitted to be allowable. Withdrawal of the rejection of claims 5, 15, 31, and 38 is earnestly solicited.

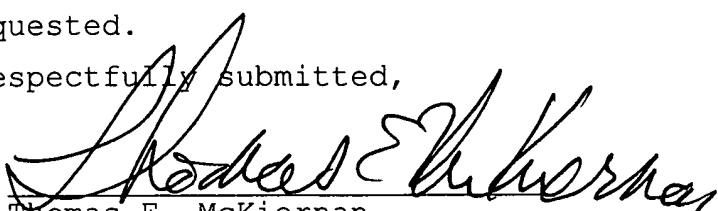
Conclusion:

In view of the above amendments and remarks, it is believed that the claims satisfy the provisions of the patent statutes and are patentable over the prior art. Reconsideration and early

notice of allowance are requested.

Respectfully submitted,

By


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Version with markings to show changes made.

1. (Twice amended) A receiver for receiving broadcast digital television signals representing both image data and information data, the receiver comprising:

[being responsive to the information data] a decoder for separating the image data and the information data;

a store for storing the received information data;

a processor responsive to the stored information data to output for display data derived from said image data and said information data and representing an interactive image[, and comprising];

a modem for establishing a telecommunications link[, the receiver] the processor being responsive [to viewer manipulation of an input device] to received command signals to vary the interactive image and to cause the modem [to establish a telecommunications link to] to transmit data to and receive on-line data from a remote site for on-line interaction via the interactive image between the viewer and the remote site.

3. (Amended) A receiver as claimed in claim 1, wherein the information data comprises program data and the processor is arranged to execute the programs contained within the information data.

4. (Amended) A receiver as claimed in claim 3, wherein the processor is arranged to respond to said viewer manipulation of the input device in accordance with instructions included in said programs [data].

5. (Twice amended) A receiver as claimed in claim 1, [wherein the stored information data comprises] further comprising a store for storing template data, and wherein the processor is arranged to construct the data representing the interactive image from received information data and the stored template data.

6. (Twice amended) A receiver as claimed in claim [2] 1, wherein the image data comprises video image data, and the decoder [is arranged to convert] comprises a converter for converting said image data into data representing a video image for display in the interactive image.

10. (Amended) A receiver as claimed in claim [9, wherein the processor is responsive to] 1, further comprising a store for storing the on-line data received via the modem.

11. (Amended) A receiver as claimed in claim 10, wherein the [store is adapted to store] processor is responsive to the on-line data received via the modem.

14. (Twice amended) A receiver as claimed in claim 1, wherein the processor is arranged to form the interactive image [comprises] as plural interactive screens [so formed as to be] that are individually displayable.

18. (Twice amended) A receiver as claimed in claim 14, wherein said interactive screens are of a predetermined size and wherein said data representing an interactive image represents an image larger in size than the predetermined size, and the processor is arranged to derive data representing one of the interactive screens from [data defining an interactive picture larger in size than the interactive screen] said data representing an interactive image.

28. (Twice amended) A method of interacting with broadcast interactive services using a receiver for receiving broadcast digital television signals representing both image data and information data, the receiver comprising a modem for establishing a telecommunications link, the method comprising:

receiving said television signals[, deriving from the data in the received signals an interactive image for display, responding to manipulation of an input device by varying the interactive image,];

separating the image data and the information data;
storing the received information data;
responding to the stored information data by outputting for display data derived from said image data and said information data and representing an interactive image;

receiving commands signals from a viewer operable input device; and

responding to received command signals by varying the interactive image and causing the modem to establish a telecommunications link [to] a remote site for on-line [transfer of data therewith in response to the manipulation of the input device] interaction via the interactive image between the viewer and the remote site.

46. (amended) An interactive services interface comprising:
a first broadcast entry level for enabling a user to select from a range of available service types;

a first broadcast interactive level, entered by user selection of a service type in the entry level, for enabling the user to select from a group of service providers of the selected type;

a second broadcast interactive level entered by user selection of a service provider in the first broadcast interactive level, for enabling the user to select from a range of classes of goods and/or services available from the selected service provider;

a third broadcast interactive level, entered by user selection of a class of goods and/or services, for enabling the user to select goods and/or services from the selected class; and
a second [another] broadcast entry level, different than the first broadcast entry level for enabling a user to enter directly

a predetermined one of the first, second and third broadcast interactive levels.

69. (amended) A [method] interactive services interface as claimed in claim 46, further comprising;

a first on-line interactive level entered from one of the three broadcast interactive levels for establishing an on-line connection with a remote site and for enabling the user to place an order for the selected goods and/or services with the remote site;

a second on-line interactive level, entered by placing an order for the selected goods and/or services, for enabling the user to complete the order with the remote site; and

a third on-line interactive level, entered by completing the order, for enabling the remote site to confirm acceptance of the order with the user.